MULTIMEDIA UNIVERSITY STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2017/2018

BBF 2154 – INVESTMENT

(All sections / Groups)

07 MARCH 2018
2:30 p.m – 4:30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 4 pages with 4 Questions only.
2. Answer **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Students are allowed to use non-programmable scientific and financial calculators.
4. Please write all your answers in the Answer Booklet provided.

QUESTION 1

(a) Assume you sell 100 shares of Setia Alam Corporation short at RM43. You also buy a 40 call option for RM4.80 to protect against the stock price going up.

(i) If the stock ends up at RM60, calculate the overall gain or loss.

(5 marks)

(ii) If the stock ends up at RM20, calculate the overall gain or loss.

(5 marks)

(iii) If you have an unprotected short sale position (no call option), what is the most you could lose?

(1 mark)

(iv) If you had a limit order to buy the stock and close out the position at RM54, calculate the net gain or loss.

(2 marks)

(b) Success Corporation foresees a non-constant growth pattern for dividends. Dividends at the end of year 1 are RM4.00 per share. The dividend are expected to grow 10% per year until the end of year 4 and 7% perpetual growth rate after that. All dividends are to be discounted back to present at a discount rate of 15%.

(i) Compute the dividend for year 2 until year 4.

(3 marks)

(ii) Solve the NPV for all dividends from year 1 until year 4.

(3 marks)

(iii) Calculate the dividend in year 5.

(2 marks)

(iv) Calculate the present value of year 4 stock price.

(2 marks)

(v) Compute the total present value of stock.

(2 marks)

(Total: 25 marks)

Continued ...

QUESTION 2

(a) Assume a stock is selling for RM48.50 with options available at 40, 50, and 60 strike prices. The 50 call option price is at RM2.75.

(i) Calculate the intrinsic value of the 50 call.

(2 marks)

(ii) Is the 50 call in the money? Explain.

(2 marks)

(iii) Calculate the speculative premium on the 50 call option.

(3 marks)

(iv) Calculate the percentage of speculative premium over the stock price.

(2 marks)

(v) Are the 40 and 60 call options in the money? Explain.

(4 marks)

(b) Dennis has invested in a bond that gives 12% coupon interest and the par value of the bond is RM1000. It is also currently priced at RM1200 with 12 years to maturity.

(i) Calculate the yield to maturity (YTM) of this bond, using semi-annual compounding.

(3 marks)

(ii) Calculate the yield to call (YTC) of this bond, using semi-annual compounding, if the call of the bond can be made in 6 years at a price of RM1030.

(3 marks)

(iii) Bond price is affected by the interest rate movement. Examine the relationship between bond price and interest rate by giving one example.

(6 marks)

(Total: 25 marks)

Continued ...

QUESTION 3

(a) Below is a portfolio consisting of the following stocks:

Stock	Investment Amount	Beta	Expected return
Larrie	RM40,000	1.80	25%
Madeline	RM32,000	1.30	20%
Neptune	RM60,000	0.80	11%
Oroton	RM43,000	1.05	13%

The Treasury bill rate is 5% and the expected return on the market portfolio is 8%.

(i) Calculate the expected return of the portfolio.

(5 marks)

(ii) Calculate the beta of the portfolio.

(5 marks)

(iii) Calculate the required rate of return.

(3 marks)

(iv) Explain the meaning of efficient frontier and discuss the relevance of the efficient frontier to portfolio selection.

(4 marks)

(b) Dennis has a portfolio that consists of two stocks, namely Stock A & Stock B. Both stocks are evenly weighted. The standard deviation for Stock A is 3.9 and for Stock B is 5.1. The correlation coefficient for both stocks is -0.70.

(i) Calculate the portfolio standard deviation.

(2 marks)

(ii) Explain standard deviation.

(2 marks)

(iii) Compare and describe the portfolio standard deviation with standard deviation for both Stock A and Stock B.

(2 marks)

(iv) What is the standard deviation of treasury bill?

(2 marks)

(Total: 25 marks)

Continued ...

QUESTION 4

(a) Key indicator series is one of the tools of technical analysis to estimate the future market movement. Technical indicator series may be detected for bearish and bullish trends. Some investors try to track the pattern of sophisticated traders in the belief that they might provide a better investment outcome or extraordinary insight into the future. Examine **TWO (2)** ways under the "smart money rules".

(10 marks)

(b) Central banks have typically used monetary policy to either stimulate an economy into faster growth or slow down growth over fears of issues like inflation. Contractionary monetary policy slows the rate of growth in the money supply or outright decreases the money supply in order to control inflation. Examine **THREE (3)** ways that can help to reduce money supply in the economy.

(9 marks)

(c) The efficient market hypothesis (EMH) is an investment theory that states it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information. Examine the characteristics of the efficient market hypothesis.

(6 marks)

(Total: 25 marks)

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